Index

MUSCADINE GRAPES or SCUPPERNONGS



U. S. Department of Agriculture

OWEN'S VINEYARD M. Aubrey Owen, Prop'r.

GAY, GEORGIA





#### DEAR FRIENDS:

**OWEN'S VINEYARD** has pioneered in developing healthy heavy-bearing plants of all the famous varieties of Muscadine Grapes and Scuppernongs suited for growth in the Southland.

More than sixty-five varieties, each with distinct flavor, growing characteristics and maturing period, are in cultivation at Owen's Vineyard. Only selected, well-rooted vines are offered for sale, all guaranteed to be true to name.

Several thousand seedling plants are being grown in test vineyards. These seedlings will be selected and used in continued breeding work for developing even better varieties than it is now possible to offer. As these new varieties are introduced information about them will be sent to you. Never buy seedlings of Muscadine or Scuppernong grapes. Seedlings do not produce fruit true to the parent stock. All vines offered for sale are reproduced asexually.

This booklet is offered to cover general information concerning vineyard plans and culture for the buyer. We shall be glad to assist the buyer in selecting the best varieties for a home or commercial vineyard. Further information concerning Muscadine Grapes may be obtained by writing the address below.

OWEN'S VINEYARD

M. aubrey Owen

M. Aubrey Owen, Prop'r. Gay, Georgia

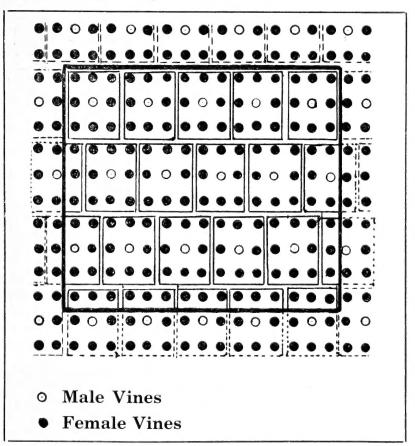
#### CULTURE

PLANTING TIME—Muscadine grapes may be set any time from November 15th to March 15th, or while dormant. The best time to set Muscadine grape vines is in December or January. This gives plenty of time for winter rains to settle the soil around the roots of the plants.

SOIL TYPE and FERTILIZER-Muscadine Grapes are suited to almost any well-drained fertile soil where the temperature does not go below zero degrees Fahrenheit in win-The use of upland is recommended. Better yields may be expected from black or sandy loam. Red land will give fruit of richer flavor. The use of manure is highly recommended, especially the first two years. The first-year plants should receive one shovel full of manure per plant. Gradually increase the amount used as plants increase in size and age. If there is any fertilizer deficiency in the soil, commercial fertilizers should be used. A 6-8-6 fertilizer is recommended. one-half pound per plant the first year, increasing this amount as vines mature. Ten-year-old vines should receive two to six pounds per plant. If vines do not show a thrifty growing condition sidedress with Nitrate of Soda to correct the deficiency. CAUTION-Do not let fertilizer or manure come in direct contact with the vine or roots.

PLAN—We recommend that one hundred eighty plants be set per acre, spacing the plants twenty feet apart in the row. The rows should be twelve feet apart. This will require one hundred sixty female (bearing) plants and twenty Male or Self-fertile plants per acre. The object of spacing Male plants throughout the vineyard is to get even distribution of pollen on all plants. A diagram should be drawn for the spacing of Male plants in the vineyard. A simple plan, plant a Male every third vine on every third row. For small vineyards, it is recommended that one Male plant be planted for each one to twelve bearing vines. The Male should be placed as near the center as possible. We suggest the follow-

ing plan for larger vineyards:



Heavy line indicates one acre.

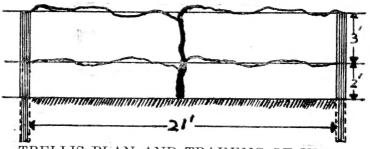
Blocks of nine vines with the Male vine in the center are used throughout the vineyard.

These blocks may be extended in all directions.

These blocks are staggered to give Male vines in each row.

TRELLIS—The trellis is constructed of posts seven feet long, set two feet in the ground. The end posts should be heavy posts eight feet long, set three feet in the ground and well-braced. One strand of No. 9 gauge smooth, galvanized wire is fastened on top of the line posts and tied at the end posts. One strand of No. 12 gauge wire is fastened two

feet from the ground. Vines should be planted midway between posts and directly under the wire. The trellis should be erected before the vines are set or at least by time growth starts on the plants. In large vineyards it is important to plan roadways at certain intervals being sure to allow enough space for turning trucks, tractors, etc. Recent experiments have shown that mature vines will produce almost as much fruit on the top wire as on both top and bottom wires. Where land is not an economic factor, one wire on top of the posts will be satisfactory.



TRELLIS PLAN AND TRAINING OF VINE.

TRANSPLANTING—Vines should be set out in the permanent location as soon as possible after shipment. permanent location is not prepared or the land is too wet to work in, the vines may be heeled in well drained soil for a few days until planting preparations can be made. In large vineyards the plowing of furrows to intersect at the proper location of the plants will save time and labor. Only a few shovels full of dirt will have to be moved with this method. CAUTION—Keep roots of vines wet at all times. The most common cause for loss of vines is the drying out of the root system. Cut off all broken or injured roots. Dig holes large enough so that the roots may be spread out without being cramped. Place vines one inch deeper in the hole than they stood in the nursery. Fill hole level with topsoil, water well, or pack soil well as hole is filled. Soil should be left level around plants after planting is finished. A straw mulch is very good to retain soil moisture around newly-set plants.

CULTIVATION—Frequent shallow and clean cultivation is necessary the first two years. Low growing crops such as lima beans, string beans, tomatoes, peas, or cotton may be grown between rows the first two years, to help defray cultivation expenses. Keep all grass and weeds from around the

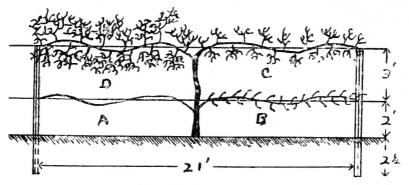
plants. NEVER CULTIVATE DEEP AT ANY TIME, three inches being the maximum depth. A disc harrow is the best tool with which to cultivate vineyards. Enough summer growth should be left on the land to control soil erosion, this may be done by disking lightly so as to control but not kill grass and weeds. Some hoeing may be needed under the trellis to control weeds. A winter cover crop of clover is recommended. With the one wire trellis some grazing can be done in the winter. Do not graze after growth starts on the grape vines in the spring.

SPRAYING—Muscadine and Scuppernong grapes are one of the few fruits that can be grown WITHOUT SPRAYING for insects or diseases. On all plants of Muscadine grapes there will be small black or brown spots on the foliage caused by black rot fungus. There is no need for alarm about this because the resulting injury is insignificent.

AGE OF BEARING—If vines receive good attention, a ton of fruit per acre may be expected the third year. This depends entirely on how fast the plants have grown. Only a few bunches per vine may be expected the second year. Production should increase until vines reach maturity at about ten years. Mature vineyards will produce regularly for forty or fifty years or longer. Vines one hundred years old are quite common. There is a record of one vine more than three hundred and fifty years old. CAUTION—A little extra attention while the vines are young will bring extra production in later years.

HARVESTING—Three methods (shaking, shelling, clipping) are commonly used in harvesting Muscadine grapes. The fastest and most economical method is shaking the fruit from the vines onto sheets spread on the ground. Fruit harvested in this manner will be badly damaged, however, if handled rapidly wine companies will accept it. Shelling the fruit by hand into buckets or baskets will give better quality. Clipping the bunches with shears is the best method when the fresh fruit is to be sold.

# PRUNING and TRAINING—The best time to prune Mus-



PRUNING GUIDE

- A Showing development of main arm.
- B Shows development of fruit spurs.
- C Shows continued development of fruit spurs.
- D Shows mature fruit spurs.

cadine grape vines is as soon as frost kills the leaves. Vines pruned before leaves fall may get sun scald. Bleeding will occur where vines are pruned after January 1st. Experimental work with different times for pruning, from the time leaves fall until growth starts in the spring, has been conducted for a period of five years. Indications are that no injury will result from pruning at any time during the dormant period. Vines pruned in February and March have bled profusely, however, no injury has shown up as a result of this bleeding. The object of dormant pruning is to balance vegetative and fruit growth.

When starting new plants a stake placed beside the plant and tied to the top wire will aid in training the vine. Select one of the strongest shoots that start out and train this shoot up the stake until it reaches the top wire. Tie the shoot loosely with string, to hold it in place. All surplus growth should be removed as plants grow. This will speed up the growth where it is needed. As the new shoots develop side shoots will appear, these side shoots should be removed from the trunk of the vine. Two of these side shoots should be

saved for the lower arms and two for the top arms. As the arms grow the side shoots that appear should be cut back to three or four buds thus forming the fruiting spurs. The illustration shows the continued development of the fruit spurs.

# KINDS OF MUSCADINE GRAPE PLANTS

There are three kinds of Muscadine grape plants, Pistillate, Staminate and Bi-sexual.

The Pistillate is commonly known as the bearing-variety or female plant.

The Staminate is the male plant which does not bear fruit but pollinates the bearing varieties.

The Bi-sexual (self-fertile) plant produces fruit and will pollinate itself and other bearing varieties.

It is necessary to have pollinator varieties (Self-fertile or Male) in close proximity to bearing (female) varieties. Experiments at the Georgia Experiment Station show that bearing (female) vines more than fifty feet from a pollinator are greatly reduced in production, sometimes as much as fifty percent. Certain new varieties have been developed that produce fruit and also pollinate bearing (female) varieties. These are known as SELF-FERTILE or bearing male plants and are recommended as MALE substitutes. These varieties will pollinate any bearing (female) variety without regard to color and will not affect or influence the color or flavor of the bearing (female) variety. All pistolate (so called bearing or female) varieties are self-sterile and produce no fruit except when pollinated by self-fertile or Male varieties.

## POLLINATING VARIETIES

BURGAW—Self-fertile; black; clusters, medium; skin, thick; fruit medium; quality, fair; persistence, good; disease resistence, fair to good; ripens around September 15th.

▼ TARHEEL—Self-fertile; black; clusters, large; fruit, small; skin, thin; quality, fair; persistence, fair; disease resistence, excellent; very vigorous and productive; ripens around September 15th.

WALLACE—Self-fertile; bronze; clusters, medium; fruit, medium; skin, medium to thick; quality, fair; persistence, fair; disease resistence, fair; ripens around September 20th.

WILLARD—Self-fertile; bronze; clusters, medium; fruit, small to medium; skin, medium to thick; quality, fair; persistence, fair; disease resistence, fair; ripens around September 5th.

MALE—Staminate Pollinator variety; does not bear fruit; will pollinate all varieties of Muscadine and Scuppernongs. Price is the same as bearing varieties.

#### BRONZE PISTILLATE VARIETIES

SCUPPERNONG—Clusters, medium; bronze; fruit, medium to large; skin, medium to thin; quality, excellent; ripens around September 4th. The best known and most widely grown variety of Muscadine grape. It is sweet with a good flavor.

STUCKEY—Clusters, small; dark bronze; fruit, large; skin, thick; quality, excellent; persistence, poor; ripens around September 12th. Stuckey is considered by many as the best Muscadine for eating fresh.

V TOPSAIL—Clusters, small to medium; bronze; fruit, large; skin, medium to thick; quality, excellent; persistence, good; vine, vigorous; ripens around September 12th. A good variety for home vineyards; very good and sweet.

✓ YUGA—Clusters, large; fruit, medium; skin, thin; light bronze; quality, excellent; ripens around October 1st. Yuga hangs on the vine well after the fruit is full ripe, often until frost.

# BLACK PISTILLATE VARIETIES

CREEK—Clusters, large; fruit, medium; skin, very thin; reddish purple; quality, excellent; persistence, fair; ripens around October 5th. Creek has the thinnest skin of all varieties, and is regarded as the best wine grape. Creek is considered very good by those who like flavor with a tart sweetness. Hangs on vine until frost.

√ DULCET—Clusters, medium; fruit, medium; skin, medium; reddish purple; quality, excellent; very persistent; hangs on vines well after fruit is full ripe, ripens around September 16th. One of the best varieties for fresh eating. Recommended for home vineyards.

✓ HUNT—Clusters, large; fruit, medium to large; skin, medium to thin; black; quality, excellent; ripens around September 10th. Hunt is the best all-purpose dark grape. It is excellent for wine, unfermented juice, jelly and jams and all other commercial purposes. Highly recommended for both home and commercial vineyards.

N THOMAS—Clusters, large and compact; fruit, small; skin, thin; reddish purple; quality, excellent; vine, vigorous; ripens around September 14th. When eating it pops with a pleasing surprise. Thomas is one of the best varieties for making unfermented juice. Thomas has a flavor of its own.

## OTHER VARIETIES

We propagate the following varieties in limited quantity. If any of these varieties are desired please write for prices. Several of this list are good for the larger home vineyards,

giving more range to the ripening period and more variety in flavor.

#### BRONZE VARIETIES

### BLACK VARIETIES

→ Brownie	✓ Creswell	<sup>→</sup> SanMonta
√ Cape Fear	→ Duplin	Mish
→ Dawn	$^{\searrow}\mathrm{Eden}$	> SanJaCinto
∠ Howard	$\sqrt{\text{Flowers}}$	Qualitas
⇒ Lucida	<sup>∠</sup> Irene	$^{\perp}$ Onslow
∠ Morrison	$\stackrel{\textstyle >}{\scriptstyle \sim}$ James	△ Scott
≥New River	$^{\perp}$ Kilgore	∠Scott's Imperial
November	∠ LaBama	<sup>4</sup> Smith
△Orton	√LaSalle	\(\sepantormal{Spaulding}\)
∠Pender	<sup>∠</sup> Latham	
≤ San Rubra	\(\lambda\)Luola	
√Stanford	△Memory	

### TERMS AND CONDITIONS OF SALES

RETAIL ORDERS will not be shipped before December 1st. Shipping season lasts until March 15th. C. O. D. shipments will be made when twenty five percent of total order is received in cash.

# ADD 25% ON ALL ORDERS FOR DELIVERY BEFORE NOVEMBER 15TH.

TERMS—Cash, unless credit arrangements are made before shipment.

GUARANTEE—We guarantee our stock to be well grown, true to name and properly packed. In no case shall our liability exceed the original invoice value. Our responsibility

ceases on delivery to the transportation company.

SHIPPING—Please give full shipping instructions with each order; otherwise we shall use our best judgment. All stock will be shipped bare root, packed in peat or spaghnum moss.

CAUTION—We accept all orders subject to crop conditions and on condition that same shall be void should injury befall our stock from hail, fire, frost, error in count, or other causes beyond our control. All orders are accepted without liability for non-performance, if labor shortages or delay in transportation should prevent us from making delivery. Do not buy any nursery stock that does not have a Department of Entomology certificate attached. This certificate is your protection against inferior stock, and peddlers of such stock.

**OWEN'S VINEYARD** is cooperating one hundred percent with The Georgia State Department of Entomology and The Georgia Experiment Station.

# It's Not A Home Until It Is Planted

... Plant America ...

# RECORD OF VINEYARD

Month and Yea				
Date First Fru	iit Picked			
	PLAN O	F VINEYA	RD	
Vine Row 1	Row 2	Row 3	Row 4	Row 5
1				
2				
3		20.70.00	-	
4				
5	А запитетите выпутка достоинализация			
6			1	
7				-
8,				
9,				
10				



